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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/604,530

07/29/2003

Ralf Naumann

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1529

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7590

12/06/2006

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EXAMINER

LOPEZ, FRANK D

ART UNIT

PAPER NUMBER

3745

DATE MAILED: 12/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/604,530

Applicant(s)

NAUMANN ET AL.

Examiner

F. Daniel Lopez

Art Unit

3745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 02 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1,3-7,9-11 and 13-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1,3-7,9-11 and 13-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

Response to Amendment

Applicant's arguments filed October 2, 2006, have been fully considered but they are not deemed to be persuasive.

Applicant's arguments with respect to claims 1, 3-7, 9, 13 and 14 have been considered but are deemed to be moot in view of the new grounds of rejection.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 112

Claims 1, 3-7, 9-11, and 13-16 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1 line 26, claim 15 and claim 16 line 22, and throughout the claims (e.g. claim 13 line 2) "lateral surfaces" appear to be the same as "sidewalls" of line 9, and so should be renamed.

Claims not specifically mentioned are indefinite, since they depend from one of the above claims.

Claim Rejections - 35 USC § 103

Claims 1, 3-7, 9, 13 and 14 are rejected under 35 U.S.C. § 103 as being unpatentable over Applicant's Admitted Prior Art (fig 10) in view of Japan 9-209,723. Applicant's Admitted Prior Art (fig 10) discloses an oscillating fluid motor comprising a rotor (9) with rotor vanes (10) rotatable relative to a stator (2) with stator vanes (6); wherein the stator vanes diverge radially inwardly, beginning at an inner wall of the stator, forming a second recess (14); that the stator vanes have a first recess (e.g. circled with leader adjacent the leader for 11)) proximal to the end face; with lateral surfaces of the widened section of a sidewall of the stator vanes pass arc-shaped into lateral surfaces of the radially inwardly positioned section; wherein the rotor vanes include a widened section tapered radially inwardly, discontinuously, from an end face

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to a radially inwardly positioned section; but does not disclose that the widened section has a width approximately 1.5 to 3 times the width of the radially inwardly positioned section; or that the sidewalls of the stator vanes match a shape of the sidewalls of the rotor vanes

Japan 9-209,723 teaches, for an oscillating fluid motor comprising a rotor with rotor vanes (117a) rotatable relative to a stator with stator vanes (119); wherein the rotor vanes include a widened section tapered (at 50) radially inwardly from an end face to a radially inwardly positioned section (adjacent 129); that the stator vanes match a shape of the sidewalls of the rotor vanes and has a width approximately 1.5 times the width of the radially inwardly positioned section.

One having ordinary skill in the oscillating fluid motor art would understand that the space between the rotor and the stator, when the rotor and stator are in a position where they are as close as they can be, is a dead space. This dead space must be pressurized before the rotor moves and therefore the larger the dead space the slower the reaction of the rotor to pressure. Also, since the dead space does not contribute to the movement of the rotor, the larger the dead space the larger the energy loss due to the dead space.

Since Applicant's Admitted Prior Art (fig 10) and Japan 9-209,723 are both from the same field of endeavor, the purpose of the teaching of Japan 9-209,723 would have been recognized in the pertinent art of Applicant's Admitted Prior Art (fig 10). It would have been obvious at the time the invention was made to one having ordinary skill in the art to form the stator vanes of Applicant's Admitted Prior Art (fig 10) such that they diverge radially inwardly and match a shape of the sidewalls of the rotor vanes, as taught by Japan 9-209,723, for the purpose of decreasing energy loss and decreasing time for the rotor to react to pressure increases.

Conclusion

Claims 15 and 16 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. § 112, second paragraph, set forth in this Office action.

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Claims 10 and 11 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. § 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Lopez whose telephone number is 571-272-4821. The examiner can normally be reached on Monday-Thursday from 6:15 AM -3:45 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Look, can be reached on 571-272-4820. The fax number for this group is 571-273-8300. Any inquiry of a general nature should be directed to the Help Desk, whose telephone number is 1-800-PTO-9199.

A handwritten signature in black ink, appearing to read 'F. Daniel Lopez', is written over a horizontal line.

F. Daniel Lopez
Primary Examiner
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December 4, 2006